

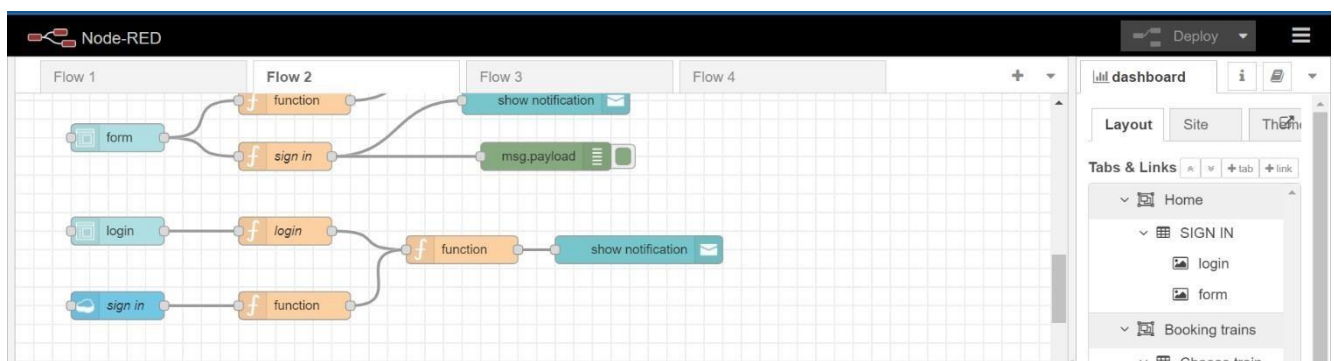
SPRINT-1

Date	19 NOVEMBER 2022
Team ID	PNT2022T MID37262
Project Name	SMART SOLUTIONS FOR RAILWAYS

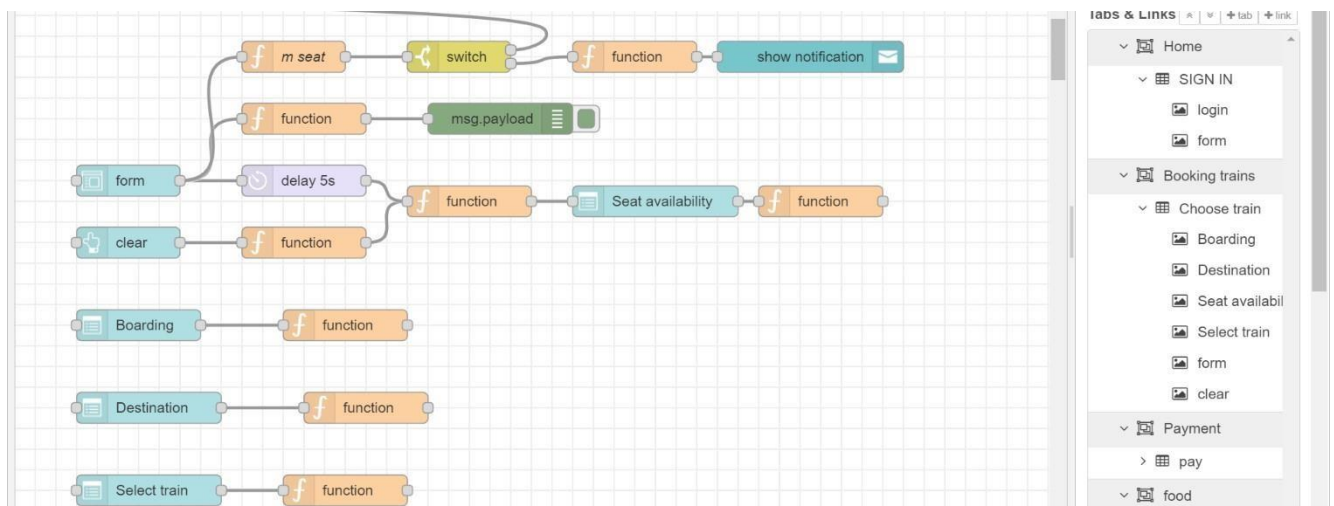
PROCEDURE:

- Srep1: Develop node red application
- Step2: Install the required nodes from manage palette option
- Step3: Connect the node flow
- Step4: Deploy the flow

WEB APPLICATION :



NODES TO BOOK TRAIN:



FUNCTION NODE COMMAND TO INDICATE THE AVAILABLE SEATS:

```
var a=global.get('a') var
s= []
for(let i=0;i<a.length==0;i++){  s.push(a[i])
}
if(s.length==0){
  msg.options=[{"No seats available":0}]
}
else{
  msg.options= s
}
msg.payload= s
return msg;
```

FUNCTION NODE COMMAND TO CHOOSE THE AVAILABLE SEATS:

```
var s=global.get('s') var
a=global.get('a') function reg(x){
for(let i=0;i<a.length;i++){
if(a[i]==x){
  a.splice(i,1)
}
}
} if(s==1){
global.set('s1',s)
reg(s)
}
else if(s==2){
global.set('s2',s)
reg(s)
}
else if(s==3){
global.set('s3',s)
reg(s)
}
else if(s==4){
global.set('s4',s)
reg(s)
}
else if(s==4){
global.set('s4',s)
reg(s)
}
return msg;
```

FUNCTION NODE COMMAND TO STORE DATA IN DATABASE:

```
var m=global.get('m')
var d=new Date();
var utc=d.getTime()+(d.getTimezoneOffset()*60000); var
offset=5.5;
newDate=new Date(utc+(3600000*offset));
var n=newDate.toISOString() var date=n.slice(0,10)
var time=n.slice(11,19)
var d1=date+', '+time msg.payload={
  "_id":d1,
  "Name":m.Name,
  "Age":m.Age,
  "Mobile":m.Num,
  "boarding":global.get('b'),
  "destination":global.get('d'),
  "Seat":global.get('s')
}
return msg;
```

FORM DETAILS:

The screenshot shows the Node-RED 'Edit form node' interface. The 'Properties' section on the left includes a 'Group' dropdown set to '[Booking trains] Choose train', a 'Size' dropdown set to 'auto', and a 'Label' text field containing 'optional label'. Below these is a table for 'Form elements'.

	Label	Name	Type	Required	UiRows	Remove
≡	Name	name	Text	<input checked="" type="checkbox"/>		
≡	Age	age	Number	<input checked="" type="checkbox"/>		
≡	Mobile num	num	Number	<input checked="" type="checkbox"/>		

At the bottom left, there is an 'Enabled' checkbox which is currently checked. On the right side, the 'debug' console shows a list of messages. The messages are objects containing train information, such as:

```
{ name: "Train1", lat: 13.08363, lon: 80.2708 }
```

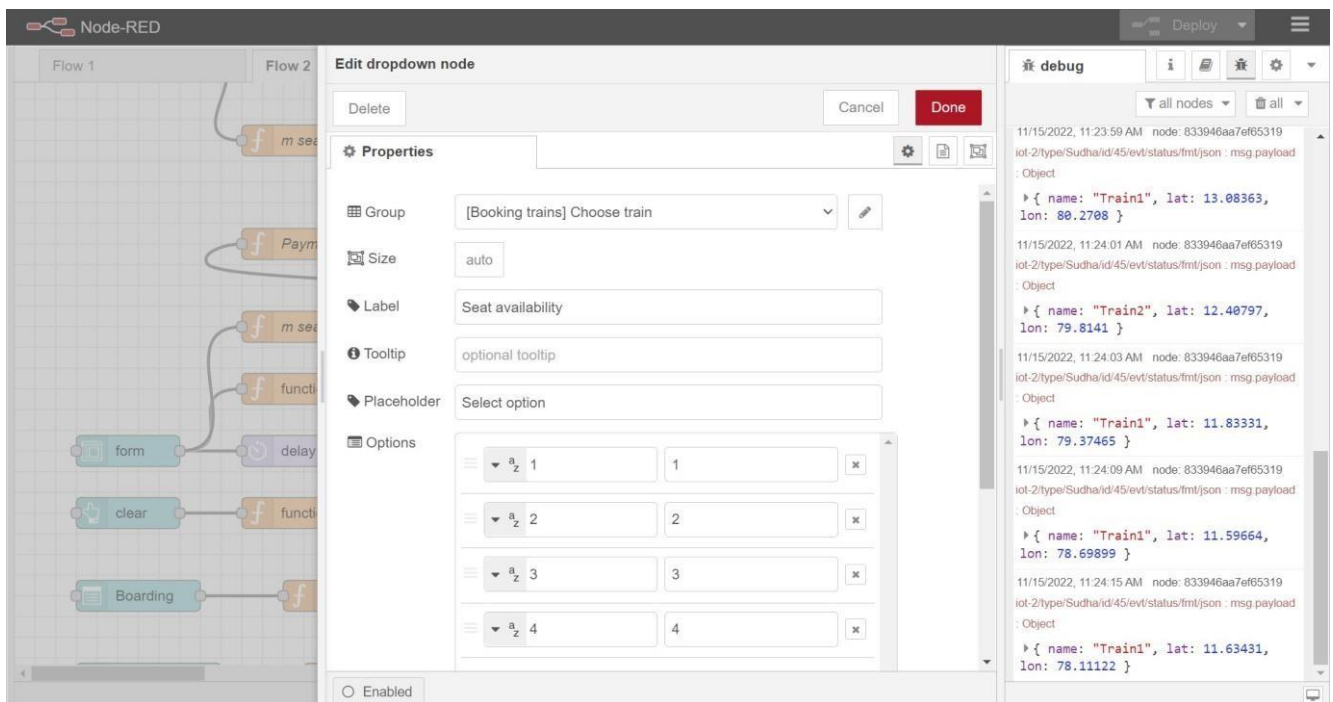
```
{ name: "Train2", lat: 12.40797, lon: 79.8141 }
```

```
{ name: "Train1", lat: 11.83331, lon: 79.37465 }
```

```
{ name: "Train1", lat: 11.59664, lon: 78.69899 }
```

```
{ name: "Train1", lat: 11.63431, lon: 78.11122 }
```

SEAT DROPDOWN BOX:



WEB UI OUTPUT:

